WHAT IS CLAIMED IS:

1.   A data collection system, comprising:

a data input form adapted to receive data,

a message queue for receiving the data from the data input form, and temporarily managing the data until the data collection system can process the data,

5   a temporary data storage for temporarily storing the data received by the message queue while waiting for the data collection system to process the data,

a transaction manager for receiving the data from the message queue and processing the data,

a data logger, for logging the processing transactions of the transaction manager,

10   a data loader for receiving the data from the transaction manager and preparing the data for storage, and

a data storage device, for receiving the data from the data loader.

2.   The data collection system of claim 1, wherein the input form resides on a presentation layer of the data collection system.

3.   The data collection system of claim 1, wherein the message queue, temporary data storage, transaction manager, data logger, and data loader all reside on a business logic layer of the data collection system.

4.   The data collection system of claim 1, wherein the data storage device resides on a data service layer of the data collection system.

5.   The data collection system of claim 1, further comprising an output form for presenting statistically manipulated historical trends of the data.

6.   The data collection system of claim 1, further comprising a statistical process control engine for receiving the data from at least one of the transaction manager and the data storage device, and statistically manipulating the data.

7.   The data collection system of claim 1, further comprising a state simulation engine for gathering and providing state data between the data collection system and a statistical process control engine.

8.   The data collection system of claim 1, wherein the data input form is implemented as a web object that is readable with a web browser.

9.   The data collection system of claim 1, further comprising a web server for serving the data input form.

10.   A data collection system, comprising:

a presentation layer including,

        a data input form adapted to receive data, and

        an output form for presenting statistically manipulated historical trends of
5   the data,

a business logic layer including,

        a message queue for receiving the data from the data input form, and
                temporarily managing the data until the data collection system can
                process the data,

10   a temporary data storage for temporarily storing the data received by the
                message queue while waiting for the data collection system to
                process the data,

        a transaction manager for receiving the data from the message queue and
                processing the data,

15   a data logger, for logging the processing transactions of the transaction
                manager, and

        a data loader for receiving the data from the transaction manager and
                preparing the data for storage, and

a data service layer including,

20   a data storage device, for receiving the data from the data loader.

11.   The data collection system of claim 10, further comprising a statistical process control engine for receiving the data from at least one of the transaction manager and the data storage device, and statistically manipulating the data.

12.   The data collection system of claim 10, further comprising a state simulation engine for gathering and providing state data between the data collection system and a statistical process control engine.

13.   The data collection system of claim 10, wherein the data input form is implemented as a web object that is readable with a web browser.

14.   The data collection system of claim 10, further comprising a web server for serving the data input form.

15.   A data collection system, comprising:

a data input form adapted to receive data,

a message queue for receiving the data from the data input form, and temporarily managing the data until the data collection system can process the data,

5   a temporary data storage for temporarily storing the data received by the message queue while waiting for the data collection system to process the data,

a transaction manager for receiving the data from the message queue and processing the data,

a data logger, for logging the processing transactions of the transaction manager,

10   a data loader for receiving the data from the transaction manager and preparing the data for storage,

a data storage device, for receiving the data from the data loader,

a statistical process control engine for receiving the data from at least one of the transaction manager and the data storage device, and statistically

15   manipulating the data,

a state simulation engine for gathering and providing state data between the data collection system and a statistical process control engine, and

an output form for presenting statistically manipulated historical trends of the data.

16.   The data collection system of claim 15, wherein the input form resides on a presentation layer of the data collection system.

17.   The data collection system of claim 15, wherein the message queue, temporary data storage, transaction manager, data logger, and data loader all reside on a business logic layer of the data collection system.

18.   The data collection system of claim 15, wherein the data storage device resides on a data service layer of the data collection system.

19.   The data collection system of claim 15, wherein the data input form is implemented as a web object that is readable with a web browser.

20.   The data collection system of claim 15, further comprising a web server for serving the data input form.